[0098] The driving body **341** is elastically-coupled to the flexible substrate unit **342** such that the driving body **341** changes position. When a voltage is applied to the driving electrode of the flexible substrate unit **342**, the driving body **341** becomes movable.

[0099] The support **343** supports the driving body **341** and the flexible substrate unit **342**, and the driving body **341** is supported by the support **113** such that the driving body **341** is freely movable in a floating state.

The driving body **341**, the flexible substrate unit **342**, and the support **343** may be integrally formed through an etching method.

[0100] The lower cap **344** serves to cover the driving body **341** and supportedly couples the sensor unit **340** to the semiconductor chip **120**. The lower cap **344** may be formed of silicon, the same as a material of the driving body **341** and the support **343**, or may be formed of Pyrex glass having a similar coefficient of thermal expansion. Silicon offers the advantages of being easier to work with and process.

[0101] The lower cap **344** is coupled to the support **343** by wafer level bonding and offers advantages of being easily processed and cost effect by maintaining the characteristics of piezoelectric thin film devices and bond at temperatures as low as 300° C. or lower. Polymer bonding using a photoresist or an epoxy is preferred to form a bonding part.

[0102] In this manner, the sensor unit **340** may have an inertial sensor, that is, an accelerometer; however, the present disclosure is not limited thereto and various sensors may be provided in the sensor unit **340**.

[0103] As described above, since the adhesive layer **130** has a thickness corresponding to the depth of the installation recess **122** and is formed of a soft and/or material, in a case in which external force is applied thereto, the impact of the external force is absorbed by the adhesive layer **130**; thus, reducing transmission of the impact to the sensor unit **340**.

[0104] In addition, since the adhesive layer **130** is disposed within the installation recess **122**, an increase in the thickness of the semiconductor package **300** due to the adhesive layer **130** is prevented.

[0105] FIG. **6** is a view illustrating another example of a configuration of a semiconductor package according.

[0106] Referring to FIG. **6**, a semiconductor package **400** includes a board **410**, a semiconductor chip **120**, an adhesive layer **130**, a sensor unit **140**, and a cap member **450**.

[0107] The board **410** may have a plate shape and may have a patterned layer (not shown). An electrode layer (not shown) allowing the semiconductor chip **120** to be mounted thereon may be provided on an upper surface of the board **410**. That is, the semiconductor chip **120** may be mounted on the board **110**.

[0108] Solder balls **416**, by which the board **410** is to be installed on a main board **10**, may be provided on a lower surface of the board **410**.

[0109] The semiconductor chip (or an application specific integrated circuit (ASIC)) **120** is mounted on the board **410**. An installation recess **122** is formed in the semiconductor chip **120** through an etching or another similar process.

[0110] When the semiconductor chip **120** in which an underside surface thereof has been etched and reversedly mounted on the board **410**, a thickness corresponding to the etching depth is gained in reducing the overall profile of the semiconductor package **300**.

[0111] When viewed top-down, the installation recess **122** provided in the semiconductor chip **120** may have a quadrangular shape as illustrated in FIG. **2**. However, the present disclosure is not limited thereto and the shape of the installation recess **122** may be variously modified according to a shape of the sensor unit **140**. That is, the installation recess **122** may have a shape corresponding to a shape of the sensor unit **130** or may have a shape that is triangular, circular, and hexagonal when viewed top-down.

[0112] The depth of the installation recess **122** may correspond to a thickness of the adhesive layer **130**.

[0113] Solder balls **124**, by which the semiconductor chip **120** is to be mounted on the board **410**, are provided between the semiconductor chip **120** and the board **410**. The solder balls **124** may be disposed to be spaced apart from one another on the lower surface of the semiconductor chip **120**, and may adhere to an electrode layer (not shown) formed on an upper surface of the board **410**.

[0114] In this manner, since a difference in coefficients of thermal expansion between the semiconductor chip **120** formed of silicon (Si) as a main ingredient and the solder balls **124** is small, an adhesion defect due to the differences in coefficients of thermal expansion therebetween is reduced.

[0115] The adhesive layer **130** is mounted within the installation recess **122**. For example, the adhesive layer **130** may be configured as a bonding layer formed of a polymer, such as a die attach film (DAF).

[0116] Also, as described above, the adhesive layer **130** may have a thickness corresponding to the depth of the installation recess **122**. The adhesive layer **130** may be formed of a soft material.

[0117] Thus, since the adhesive layer **130** is formed of a soft and/or elastic material, it provides shock and impact protection by absorbing external force applied thereto. In the semiconductor package **400**, when external force or shock is attendant on the sensor unit **140** disposed on the adhesive layer **130**, transmission of the impact to the sensor unit **140** is limited or eliminated.

[0118] In addition, since the adhesive layer **130** is disposed within the installation recess **122**, an increase in a thickness of the semiconductor package **100** due to the adhesive layer **130** is prevented.

[0119] The sensor unit **140** may include a sensor die **142** mounted on the adhesive layer **130** and a pressure sensor **144** installed in the sensor die **142**.

[0120] The pressure sensor **144** and the board **410** may be electrically connected through bonding-wire.

[0121] In the present example, a case in which the pressure sensor **144** is provided in the sensor unit **140** is described as an example, but the present disclosure is not limited thereto and types of sensors provided in the sensor unit **140** may be variously modified.

[0122] Also, the cap member **450** forms an airtight space together with the board **410**. The cap member **450** may be formed of a metal or plastic and may have a box shape with a lower end portion thereof open.

[0123] Thus, since the sensor unit **140** is disposed in the airtight space formed by the cap member **450** and the board **410**, damage to the sensor unit **140** due to external the impact of the external force may be prevented.

[0124] As described above, since the solder balls **416** are provided on the lower surface of the board **410**, the semiconductor package **400** may be installed on the main board **10** through soldering.